Description: The silent information regulator (SIR2) family of genes are highly-conserved from prokaryotes to eukaryotes and are involved in diverse processes, including transcriptional regulation, cell cycle progression, DNA damage repair and aging. In S. cerevisiae, Sir2p deacetylates histones in an NAD-dependent manner, which regulates silencing at the telomeric, rDNA and silent mating-type loci. Sir2p is the founding member of a large family, designated sirtuins which contain a conserved catalytic domain. The human homologs, which include SIRT1-7, are divided into four main branches: SIRT1-3 are class I, SIRT4 is class II, SIRT5 is class III and SIRT6-7 are class IV. SIRT1 has the closest homology to the yeast Sir2p and is widely expressed in fetal and adult tissues, with high expression in heart, brain and skeletal muscle, and low expression in lung and placenta. SIRT1 regulates the p53-dependent DNA damage response pathway by binding to and deacetylating p53, specifically at Lysine 382.

Immunogen: Amino acids 448-747 of SIRT1 of human origin.

Positive control: MES-SA/Dx5, human lung tissue.

Recommended Dilutions:
WB: 1:100-1:1,000
IP: 1-2 μg per 100-500 μg of total protein (1 ml of cell lysate)
IF: 1:50-1:500
IHC: 1:50-1:500

Buffer: 1*TBS (pH7.4), 1%BSA, 40%Glycerol. Preservative: 0.05% Sodium Azide.

Storage: Store at +4°C, “DO NOT FREEZE”.

Purity: ProA affinity purified.

Applications: WB, IP, IF, IHC(P)
Lot#: See on the tube
Form: Liquid
MW: 120kDa
Background References:
